

**PARASITIC ELEMENT AND PIFA ANTENNA STRUCTURE****ABSTRACT OF THE DISCLOSURE**

5           A Parasitic Element (202) for use in combination with a Planer Inverted “F”  
Antenna (PIFA) (100) that creates an additional band of efficient operation for the  
combined antenna structure (200). The parasitic element (202) is able to be made to  
conform to surfaces (704) that are near the PIFA, such as of a case (704) of a cellular  
telephone (706). The parasitic element (202) is positioned so as to radiantly couple  
10   with the PIFA (100) in order to create the additional band of efficient operation. A  
parasitic element (202) is used with a dual band PIFA that operates in two RF bands,  
such as in the region near 800MHz and 1.9 GHz, and adds a third band such as in the  
region near 1.575 GHz to support reception of Global Positioning System signals.  
This parasitic element (202) can conform to a case (704) of the cellular telephone  
15   (706).